

IN THE CLAIMS:

Please cancel claims 1-9 of record and substitute the following new claims 10-15, without prejudice.

LISTING OF CLAIMS

Claims 1-9 (Cancelled).

Claim 10 (New). An optical disk drive that can write data in an optical disk at a plurality of rotative modes, comprising:

a storage unit configured to store information indicating how a tracking offset value is to be varied corresponding to each of the plurality of rotative modes; and

a control unit configured to:

read the information indicating how the tracking offset value is to be varied from said storage unit;

writes test data in a first plurality of frames of the optical disk using the tracking offset value being varied based on the information,

read the test data written in the first plurality of frames thereby to obtain characteristic values of the first plurality of frames, and

determine the optimum tracking offset value of the optical disk drive based on the obtained characteristic values.

Claim 11 (New). The optical disk drive as claimed in claim 10, wherein said control unit is further configured to:

repeat the writing of test data in a second plurality of frames of the optical disk using the tracking offset value being varied based on the information in the same manner,

obtain average characteristic values of frames in which the test data is written using the same tracking offset value; and

determine the optimum tracking offset value of the optical disk drive based on the obtained average characteristic values.

Claim 12 (New). The optical disk drive a claimed in claim 11, wherein the frames in which the test data is written using the same tracking offset value are located at different angular positions of the optical disk.

Claim 13 (New). In an optical disk drive that can write data in an optical disk at a plurality of rotative modes, a method of determining an optimum tracking offset value of the optical disk, the method comprising the steps of :

reading the information indicating how the tracking offset value is to be varied corresponding to each of a plurality of rotative modes;

writing test data in a first plurality of frames of the optical disk using the tracking offset value being varied based on the information,

reading the test data written in the first plurality of frames thereby to obtain characteristic values of the first plurality of frames, and

determining the optimum tracking offset value of the optical disk drive based on the obtained characteristic values.

Claim 14 (New). The method as claimed in claim 13, further comprising the steps of:

writing test data in a second plurality of frames of the optical disk using the

tracking offset value being varied based on the information in the same manner;

reading the test data written in the second plurality of frames thereby to obtain characteristic values of the second plurality of frames; and

obtaining average values of frames in which the test data is written using the same tracking offset value;

wherein:

the optimum tracking offset value of the optical disk drive is determined based on the obtained average values.

Claim 15 (New). The method as claimed in claim 14, wherein the frames in which the test data is written using the same tracking offset value are located at different angular positions of the optical disk.